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ABSTRACT

Despite the rhetoric acclaiming it as a new paradigm, educational researchers have tended to treat naturalistic inquiry as a new or alternative method employed within the dominant, rationalistic paradigm. Spokespersons for naturalistic inquiry tend to concentrate on what one does differently rather than how one perceives what one is doing differently. If naturalistic inquiry is to become an accepted paradigm of inquiry in education, it must be clearly distinguished from rationalistic methods. A case comparison approach is presented to highlight the differing beliefs and attitudes about research held by researchers in two case examples. Beliefs about the nature of scientific knowledge, ways of knowing, and the role of the inquirer in inquiry exemplified in the published reports are examined. Despite similarities in method, the examples display different attitudes toward inquiry. These are used as a basis for drawing conclusions about the diffusion of naturalistic inquiry into the mainstream of educational research: (1) it is important to distinguish naturalistic paradigms from naturalistic methods; (2) naturalistic inquiry may be as useful to educational research as a paradigmatic set, and (3) educational research needs naturalistic inquiry both as a paradigm and a method, but to be effectively utilized the two must be distinguished. (CM)

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NATURALISTIC INQUIRY: PARADIGM AND METHOD

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The dominant paradigm in educational research today is derived from the so-called hard sciences--physics, biology, chemistry. With that paradigm go certain assumptions about science and certain conventions related to doing science. Recently, however, there has been a groundswell of interest in another view of research, a view derived from the softer sciences of sociology and anthropology. I shall follow Guba (1981) in labelling these paradigms rationalistic and naturalistic, respectively. Their distinguishing characteristics are not unfamiliar and are summarized in table 1. Rationalistic inquiry is equivalent to our stereotypic view of science and scientists. It is associated with experiments, laboratories, controls and quantification. Naturalistic inquiry, on the other hand, is less familiar and has been challenged as being "sloppy" research and not even research at all. In comparison with rationalistic inquiry, naturalistic inquiry is unbounded, uncontrolled, and unmeasured. However, both critics and advocates alike need to keep in mind that:

- Naturalistic inquiry may be emergent in the field of education, but it is not a "new" paradigm of inquiry. Guba (1978) notes that the term ethnography first appeared in anthropology in 1922. What's new is its popularity and use in doing educational research.
- Naturalistic inquiry is a distinct and complete paradigm of inquiry. It is not a development or offshoot of rationalistic inquiry.

The naturalistic paradigm has been heralded as an emergent replacement for the dominant rationalistic view in education. According to Guba:

> [A] struggle is now occurring in the social sciences: between the established "rationalistic" paradigm and the emergent "naturalistic" paradigm. Whether or not the naturalistic paradigm will successfully deal with the problems and anomalies with which the rationalistic paradigm has not been able to cope remains to be seen. There is no doubt that the confrontation will be lively, and that the outcome will have enormous implications for the conduct and meaning of research and development in all fields. (1981, p. 1)

Patton, too, recognized a potential shift in paradigm when he lamented the dominance of the rationalistic paradigm: "The label 'research' has come to mean the equivalent of employing the 'scientific method,' of working within the dominant paradigm. There is, however, an alternative." (1978, p. 207)

However, the diffusion of the new paradigm has been accomplished with mixed results. Many individual inquirers are now advocating naturalistic inquiry, but within that group the term has taken on different meanings. To some it is a new paradigm of inquiry, to others it is a new or alternative set of tools for inquiry, and to still others it is sometimes the former and sometimes the latter. Egon Guba is generally among the first group, advocating naturalistic inquiry as an emergent or alternative paradigm of inquiry (although on occasion even Guba (1981, p. 12) has treated the new paradigm as a set of methods). Patton is probably among the second group most of the time. He has acclaimed a new paradigm, a "paradigm of choices" that "recognizes that different methods are appropriate for different situations" (1980, p. 20).

By and large, despite the rhetoric acclaiming a new paradigm, educational researchers have treated naturalistic inquiry as a new or alternative method employed within the dominant, rationalistic paradigm. Among the possible explanations for this is the notion that it is easier to describe an innovation in behavioral rather than affective terms. Hence leading spokespersons for naturalistic inquiry tend to concentrate on what one <u>does</u> differently rather than how one <u>perceives</u> what one is doing differently. As a result educators trying to use the tools of naturalistic inquiry, while claiming to be working in a new paradigm of inquiry have drawn fire from anthropologists and sociologists:

- Educators are using anthropological tools without understanding anthropology's cosmology. (Fetterman 1982, p. 18)

- o One could do a participant-observer study from now till doomsday and never come up with a sliver of ethnography (Wolcott 1980, p. 59)
- o Ethnography is not a matter of methods. (Geertz 1973, p. 6)

If naturalistic inquiry is to become an accepted paradigm of inquiry in education that is alternative to the traditional, rationalistic paradigm, it must be clearly distinguished from the use of naturalistic methods in the service of various paradigms. It is the intent of this paper to compare and contrast naturalistic inquiry with naturalistic methods and assess the likely benefits to educational research of each.

Types of Scientists

A paradigm of inquiry is not a set of methodological alternatives. A paradigm describes the various beliefs and attitudes held by the inquirer about the nature of scientific inquiry and the role of the inquirer. Certain methodological preferences may be associated with certain paradigms but there is no reason why any methodological approach could not be used with any paradigm of inquiry. Methods are the tools; the paradigm is the mindset or gestalt for using the tools.

Mitroff and Kilmann (1978) provide a useful framework for comparing paradigms of inquiry with their typology of scientists. They suggest that there are four basic scientific "types" or perspectives toward inquiry: the Analytical Scientist, the Conceptual Theorist, the Conceptual Humanist, and the Particular Humanist. These four types can be distinguished by various beliefs and attitudes about (1) the nature of scientific knowledge, (2) ways of knowing, and (3) the role of the scientist in inquiry. These beliefs, in turn, lead the inquirer to adopt certain procedures and methods in carrying out their inquiry. What is useful about this framework is that it permits one to compare styles of inquiry in non-methodological terms.

The analytical scientist is the type which most clearly fits the image of the traditional scientist, and hence the rationalistic paradigm of inquiry. According to Mitroff and Kilmann (1978), the analytical scientist believes that scientific knowledge is certain and value-free, that the experimental method and the techniques of positivist science are most appropriate for discovering an objective and a priori reality, and that the role of the scientist in inquiry is one of a disinterested observer. Which one of the remaining three types most nearly fits the naturalistic paradigm of inquiry is a moot point, since the existence of other scientific beliefs and roles is sufficient to establish that a researcher working within the naturalistic paradigm would hold attitudes and beliefs different from those held by the analytical scientist.

Case Comparison

A case comparison approach is used to highlight the differing beliefs and attitudes about research held by researchers in two case examples. The analysis focuses on their beliefs about the nature of scientific knowledge, ways of knowing, and the role of the inquirer in inquiry as exemplified by the researchers' descriptions of their studies (i.e., the published reports). These data will then be compared to the attitudinal template provided by Mitroff and Kilmann (1978). The purpose of this exercise is to relate and distinguish methods for inquiry from paradigms of inquiry.

The Case Examples

Two studies are used as examples, each typical of a genre of inquiry. Each is a case study of a school, and each used qualitative methods, i.e., participant observation, interviewing, and document analysis, to collect their data. However, as will be shown below, one example typifies research within a

rationalistic paradigm, while the other typifies research within a naturalistic paradigm of inquiry.

The first example is drawn from the report of the Documentation and Technical Assistance (DTA) Project, funded by the National Institute of Education, and carried out by the Center for New Schools in Chicago, Illinois. The case study is entitled, Implementing Organizational Development Strategies at the Local Urban School: A Case Study of the Imaginative Educational Cooperation Project, drawn from a report prepared by Robert P. Brown and edited by Arthur A. Hyde. The report is dated April 1978. The intent of the study was to document a particular school improvement intervention effort and the local problem solving capacity surrounding it.

The second example is a case study of a single sixth-grade classroom in an elementary school in a city in Canada. The study was conceived and carried out by Elaine Batcher and the report from which these data are drawn is dated 1981. The focus of Batcher's study is emotion in the classroom.

The comparison will focus on the differing attitudes held by the researchers about inquiry as manifest in each report. Although not based on actual interviews with each researcher, this approach, by focusing on the artifacts of their work, avoids the possible distort of a post hoc analysis and lets reported actions and emphases speak for the underlying attitudes and beliefs.

Ways of Knowing

Despite the use in both studies of what are termed qualitative methods, the researchers in these two studies demonstrated quite distinct perspectives on the ways one can know the world. The DTA case study emphasized documenting, in the sense of, supplying with evidence. One could know something if it was

documented or supported with evidence. This attitude or belief about knowing posits an underlying, objective reality which exists outside of human experience. In this case the reality being pursued was the problem-solving capacity of local urban schools and the events surrounding the implementation of several funded strategies for school improvement. When evidence was lacking, one could not "know" what had occurred, to wit:

> The principle reason that the outcome of the IEC project at Washington cannot be evaluated is methodological in nature. The fact is, we have no documented evidence about the state of individual problem-solving skills or about the state of collaborative decision-making structures at Washington prior to the start of the IEC project. Therefore, we cannot say that these variables have changed over time. (Brown 1978, p. 56)

This is in sharp contrast with the beliefs about knowing demonstrated in Batcher's case study. Batcher's mode of knowing was to learn and to personally experience the classroom milieu she was studying. "In becoming a member of the on-going situation myself, I learned to understand meanings in a situation by sharing them" (Batcher 1981, p. 27). In this she was following the classical anthropological tradition in which one knows through verstehen, "what Weber called an emphatic understanding or an ability to reproduce in one's own mind the feelings, motives, and thoughts behind the actions of others" (Bogdan and Taylor 1975, p. 14). This attitude toward knowing, in contradiction with that of the DTA study, posits an underlying subjective and created reality, a reality of symbols and meaning constructed by people, individually and in groups, as it is experienced.

Nature of Scientific Knowledge

The DTA case study was to document the impact of a given strategy for school improvement and the local capacity for problem-solving. Those very intentions imply a belief in scientific knowledge as general, certain,

reliable and value-free. These researchers were using qualitative methods to test certain hypotheses about schools. The researchers were looking for common and generalizeable features which could be of use generally. The researcher's willingness to speculate about the intrinsic meaning of events documented is offered as evidence of a belief in knowledge that is certain, general and reliable.

> Upon reflection, it was clear that a high degree of innovative activity with no sustained change may reflect a highly accomplished problem-solving capacity. . . . Developing innovative programs and getting them funded, no matter whether the programs are successfully implemented, can be seen as a successful solution to other personal problems as well. . . . All this is to say that developing innovative activities and getting them funded is a class of behavior which can result from many conditions, only one of which is that stated in the funding proposal. (Brown 1978, p. 121)

Brown was collecting evidence in support of certain underlying "truths." He could not know those truths until he had collected sufficient evidence to rule out alternative plausible hypotheses. Scientific knowledge was something concrete and unalterable, if difficult to uncover.

Batcher had a different view of scientific knowledge.

> The "truth" of emotion, if it exists, may never be known, but there is a knowable, communicable social reality which can be described and explained. This reality is created, understood, and shared by participants in the setting, and one of the ways of determining it is by belonging to the setting. (Batcher 1981, p. 20)

To her, scientific knowledge is, and must be, "grounded" in real events (cf. Glaser and Strauss, 1967). It is inherently personal, clearly experiential, and high contextual.

> The case method was eminently suited for the investigation, discovery, and analysis of multiple perspectives existing among participants in the setting. The task of the research was to capture verbal images of these as accurate statements of the original setting, to convey these to the reader, and to use these in the discovery of grounded theory. (Batcher 1981, p. 23)

Batcher was looking for scientific knowledge within her experiences in a particular classroom. Scientific knowledge, to her, was personal in the sense of deriving from the meanings persons ascribed to events and interactions.

The Role of the Inquirer in Inquiry

Based upon the perspectives toward knowing and knowledge demonstrated in the DTA project, one might predict a role for the inquirer as observer or stage manager in the inquiry rather than as participant. And, in fact, much of the material describing the study supports that view. For example, researchers were to document the events surrounding a funded intervention. The researchers, then, were to record the reactions of local schools to these stimuli. Also, a conscious effort was made to "factor out" individual researchers' biases (Wilson 1977, p. 129).

Batcher, on the other hand, was much more willing to become personally involved with the research setting. As researcher, Batcher became the research instrument, learning from and being involved with the setting. She introduces the study with a section on herself. "By setting out a few of the particulars of my own experience and some of my expectations for this study, it is hoped that the reader can come to an understanding of what I saw" (Batcher 1981, p. 25). While the DTA researchers tried to control for researcher effects, Batcher tried to explain them.

Summary

Despite similarities in method, the two examples displayed different attitudes toward inquiry. The researchers working on the DTA project manifest a belief in a general, objective reality which transcended context. The researchers were, in the main, trying to record events. The knowledge they pursued was objective, certain, and impersonal. Batcher, in her case study,

aspired to a much more personal sort of knowledge in which ascribed meanings and experience were preeminent.

The DTA example seems to fall within the traditions of logical positivism and the rationalistic paradigm of inquiry. Batcher's case study seems more closely aligned to the phenomenological tradition and the naturalistic paradigm of inquiry. To return to Mitroff and Kilmann (1978), Brown and the other researchers on the DTA project were quite close to the model of the analytical scientist, proceeding in a manner not unlike the scientific method. The case studies were used to record the effects of certain interventions. The aim was to produce clear and reliable information about schools and the behaviors manifest by them under certain conditions. Only part of the school setting was explored--that related to the funded intervention.

Batcher doesn't really fit the analytical scientist model. To her knowledge is social, and hence personal. One can know only through learning and experiencing, through an intimate involvement with a particular setting. Her interest was in the whole setting, in emotion as it permeated all classroom interactions.

Conclusions

Three conclusions about the diffusion of naturalistic inquiry into the mainstream of education research can be drawn from this comparative exercise.

1. It is important to distinguish a naturalistic paradigm from naturalistic methods. A naturalistic paradigm is related less to the methods employed than to the attitudes and beliefs of the researcher. Fostering naturalistic inquirers will involve a conversion process in which individuals' beliefs about themselves as researchers and the role of research are altered. Whether or not the same individual can work in either rationalistic or naturalistic paradigms at will remains to be seen.

2. Naturalistic inquiry may be as useful to educational research as a procedural approach as a paradigmatic set. The naturalistic attributes demonstrable under a rationalistic paradigm of inquiry, e.g.,

of inquiry, e.g., research aggregation, illustrate that naturalistic methods can be used to broaden and enrich our repertoire of inquiry skills within the traditional paradigm. It will be easier to extend researchers' skills in doing research than to change their attitudes toward research.

3. Educational research needs naturalistic inquiry both as a paradigm and a method, but to be effectively utilized the two must be distinguished. Educational research surely will benefit from the presence of new methods and new paradigms, but confusing the two hampers the diffusion of both.

> Few educational researchers are aware that they are standing in the middle of a battleground. They are chastised for using novel techniques inappropriately and are labelled statistical relics or outmoded number crunchers if they do not use the new techniques. These researchers are trying to improve their capabilities by augmenting their research arsenal. Their only transgression is that they have mislabelled their efforts. Rather than conducting ethnographic studies, they are simply using ethnographic technques. (Fetterman 1982, p. 17)

The solution, of course, is for the many advocates of, and adherents to, naturalistic inquiry to recognize that paradigms of inquiry involve certain assumption grounds about one's self as researcher and that proselitizing at the level of methods and procedures only tells half the story.